

CLAIMS

What Is Claimed Is:

1 Claim 1. A compact driving unit for an automatic banknote receiving and storing
2 unit, comprising:
3 a chassis;
4 a banknote accepting unit for accepting a banknote, the banknote accepting
5 unit being mounted in the chassis;
6 a safe unit for retaining accepted banknotes, the safe unit including a banknote
7 storing section, the safe unit being mounted within and removable from the chassis;
8 a transporting unit for moving an accepted banknote from the banknote
9 accepting unit to a position adjacent the banknote storing section, the transporting unit having
10 a driving crank with a driver eccentrically mounted, the transporting unit being mounted
11 within and removable from the chassis;
12 a translating unit for non-rotationally displacing an accepted banknote to a
13 position within the banknote storing section; and
14 a driving lever for operating the translating unit, the driving lever being driven
15 by the transporting unit driving crank driver.

1 Claim 2. The compact driving unit for an automatic banknote receiving and storing
2 unit of Claim 1,
3 wherein the driving lever is mounted on a shaft and pivots in a plane which is
4 parallel to a plane traversed by the transporting unit as it is attached to the chassis, the driving
5 lever having a driven section located at the end of the driving lever facing an opening for
6 attaching the transporting unit to the chassis, the driven section for contact with the driving

7 crank, the end of the driving lever opposite the driven section being a driving section for
8 operating the translating unit.

1 Claim 3. The compact driving unit for an automatic banknote receiving and storing
2 unit of Claim 1,

3 wherein the translating unit includes a pushing board and a parallel linkage.

1 Claim 4. The compact driving unit for an automatic banknote receiving and storing
2 unit of Claim 2,

3 wherein the driving lever is located at a side of the chassis.

1 Claim 5. A compact driving unit for an automatic banknote receiving and storing
2 unit, comprising:

3 a chassis having a chassis opening;

4 a driving lever which is located at a side wall of a storing section of the
5 chassis, the driving lever having a driving section and a driven section;

6 a safe unit having a storing section for storing banknotes, the safe unit being
7 detachably mounted in the chassis, the safe unit being adjacent to the side of the driving
8 lever;

9 a transporting unit for transporting a banknote, the transporting unit being
10 detachably mounted in the chassis and slidable along the side wall into an upper storing
11 section of the chassis, the transporting unit being located closer to a side of a chassis opening
12 than the driven section, the transporting unit has a driving crank for contacting and driving
13 the driven section thereby driving the driving section, the driven section faces the side of the
14 chassis opening; and

15 a translating unit for non-rotationally displacing a banknote into the banknote
16 storing section, the translating unit being detachable from the chassis at a lower storing

17 section and slideable along the side wall, the translating unit having contact with the driving
18 section of the driving lever, the translating unit being driven by the driving section to move a
19 banknote into the storing section.

1 Claim 6. The compact driving unit for an automatic banknote receiving and storing
2 unit of Claim 5,

3 wherein the translating unit includes a pushing board and a parallel linkage.

1 Claim 7. A compact banknote safe, comprising:

2 a banknote storing section;

3 a first driven lever for receiving a driving force;

4 a translating unit for non-rotationally displacing a banknote into the banknote

5 storing section, the translating unit being operated by a second driven lever; and

6 an elastic member attached between the first driven lever and the second

7 driven lever, the elastic member for applying a variable contraction force and elastically

8 linking the movement of the first driven lever to the second driven lever,

9 wherein the first driven lever can receive a driving force to move in a first

10 direction thereby moving the second driven lever and causing the translating unit to move a

11 banknote into the banknote storing section.

1 Claim 8. The compact banknote safe of Claim 7, further comprising:

2 a banknote access door for removing stored banknotes from the banknote
3 storing section.

1 Claim 9. The compact banknote safe of Claim 7,

2 wherein the translating unit includes a pushing board and a parallel linkage.

1 Claim 10. The compact banknote safe of Claim 7,

2 wherein the elastic member is a spring.

1 Claim 11. The compact banknote safe of Claim 7,

2 wherein the elastic member is a rubber band.

1 Claim 12. The compact banknote safe of Claim 7,

2 wherein the parallel linkage further comprises:

3 a first link member having a length L, a first end, and a second end, the first
4 end of the first link member being radially attached to a first shaft, the first shaft can be
5 rotated about the long axis of the first shaft so that the second end of the first link member
6 moves around the first shaft;

7 a second link member having a length L, a first end, and a second end, the first
8 end of the second link member being radially attached to a second shaft, the second shaft can
9 be rotated about the long axis of the second shaft so that the second end of the second link
10 member moves around the second shaft, the axes of the first shaft and the second shaft being
11 parallel to each other, the first shaft and the second shaft being located a predetermined
12 distance apart; and

13 a bracket member mounted to the second end of the first link member and the
14 second end of the second link member by pins so that the bracket will not rotate during
15 displacement as the first shaft is rotated a predetermined amount.

1 Claim 13. The compact banknote safe of Claim 9,

2 wherein the translating unit includes a sliding board mounted between the
3 parallel linkage and the pushing board to allow the pushing board to maintain contact with a
4 moving banknote without slipping.

1 Claim 14. The compact banknote safe of Claim 12,

2 wherein the parallel linkage further comprises:

3 a third link member mounted parallel to the second link member, the third link
4 member having a length L , a first end, and a second end, the first end of the third link
5 member being radially attached to a second shaft, the second shaft can be rotated about the
6 long axis of the second shaft so that the second end of the third link member moves around
7 the second shaft; and

8 a second bracket member mounted parallel to the first bracket member,
9 wherein the first link member is mounted between the first bracket and the
10 second bracket forming an inside region between the first bracket and the second bracket
11 while the second link member is mounted on the first bracket on the side opposite from the
12 first link member and the third link member is mounted on the second bracket on the side
13 opposite the first link member.

1 Claim 15. The compact banknote safe of Claim 12,

2 wherein the bracket is triangular in shape.